

## APPENDIX A

### “GARVEE” Status

**D**uring the 2005 legislative session, the KYTC was provided enabling legislation and approval to pursue a specific group of interstate widening projects through an innovative financing technique known as “Grant Anticipation Revenue Vehicles (GARVEEs).” This financing technique is permitted by federal law and involves the commitment of future federal-aid appropriations as leveraging for current year highway improvements. The primary benefit of such an arrangement is that major highway improvements can be purchased at today's prices and paid for with interest over a multi-year timeframe. The application of the GARVEE principle is very similar to home mortgage financing but is used to purchase major highway investments when “pay-as-you-go” is not the desirable course.

As permitted by the 2005 General Assembly, the KYTC has begun the following major interstate widening projects to be pursued during the next few years:

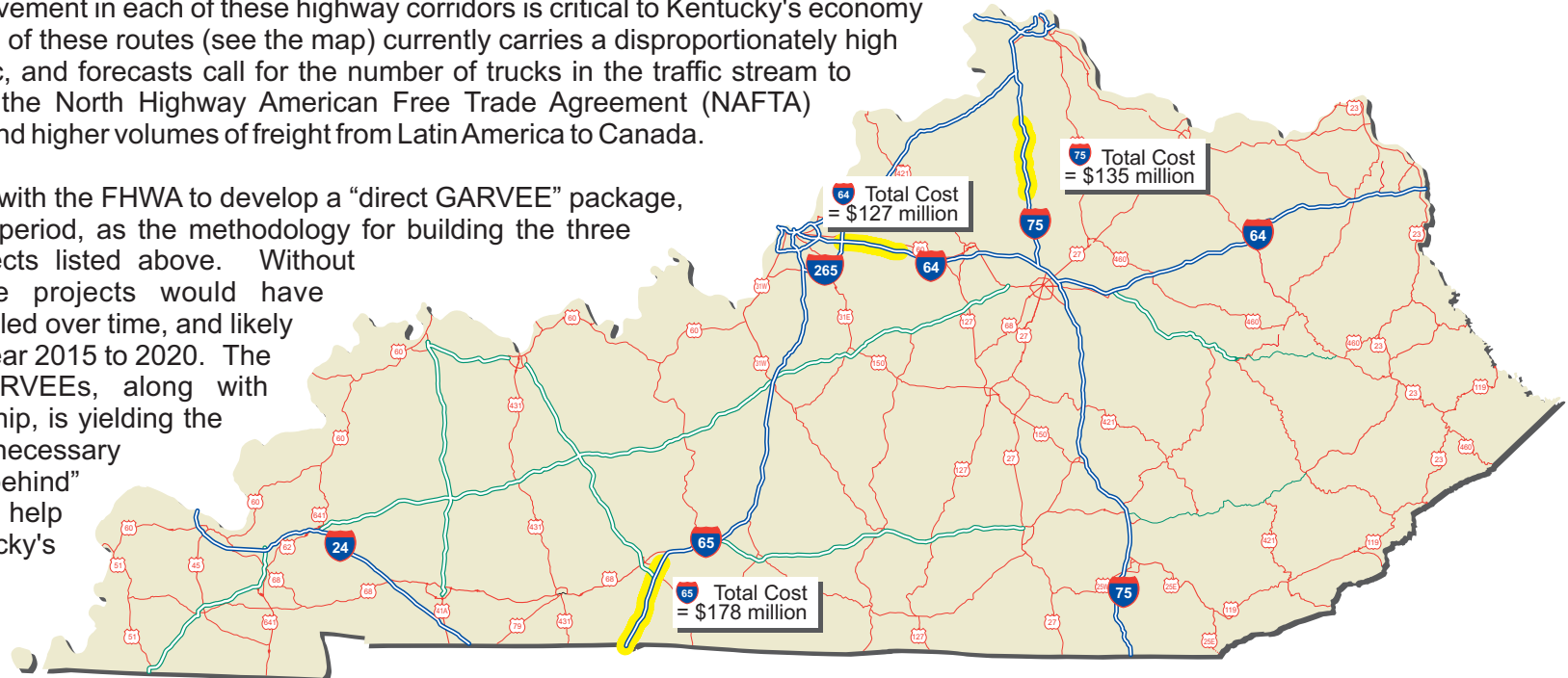
**Interstate 64:** Widen to six lanes from the Snyder Freeway in Jefferson County toward Shelbyville (total cost \$127 million)

**Interstate 65:** Widen to six lanes from the Tennessee State line to Bowling Green (total cost \$178 million)

**Interstate 75:** Widen to six lanes from the end of the current six-lane section in northern Scott County to the current six-lane section south of KY 22 in Grant County (total cost \$135 million)

The spending status for the current \$150 million GARVEE authorization is shown on the following page. Each of these interstate widening projects constitutes a necessary investment in Kentucky's future. The need to accommodate both people movement and freight movement in each of these highway corridors is critical to Kentucky's economy in the years ahead. Each of these routes (see the map) currently carries a disproportionately high percentage of truck traffic, and forecasts call for the number of trucks in the traffic stream to continue to increase as the North Highway American Free Trade Agreement (NAFTA) continues to yield higher and higher volumes of freight from Latin America to Canada.

The KYTC has worked with the FHWA to develop a “direct GARVEE” package, financed over a 12-year period, as the methodology for building the three interstate widening projects listed above. Without GARVEEs, these three projects would have continued to be piecemealed over time, and likely not completed until the Year 2015 to 2020. The innovative idea of GARVEEs, along with determined state leadership, is yielding the kind of realistic solution necessary to reverse the “always behind” mentality of the past and help restore hope to Kentucky's transportation program.



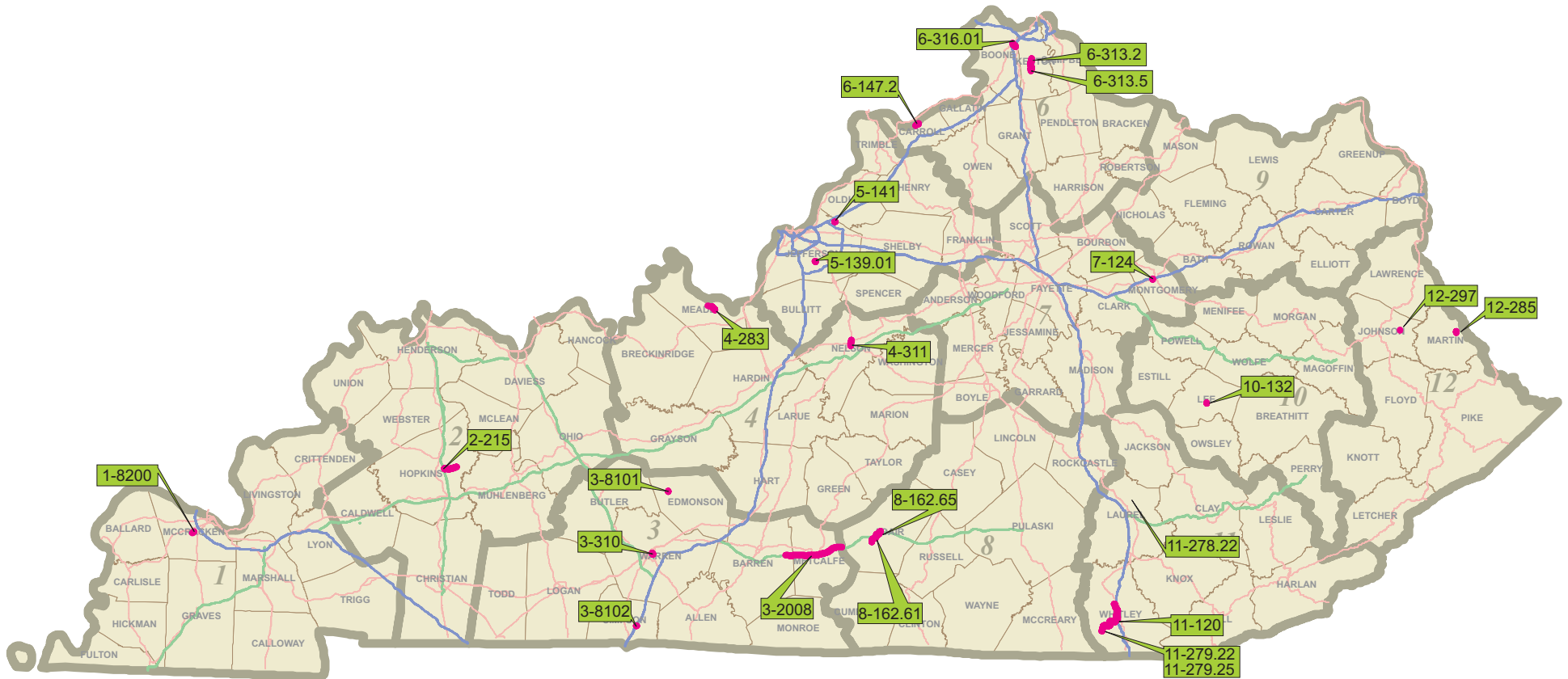
LISTING OF AWARDED GARVEE BOND PROGRAM PROJECTS  
(AS OF FEBRUARY 3, 2006)

LETTING DATE	DIST	ITEMNO	COUNTY	PREFIX	ROUTENO	TYPE OF WORK	PROJECT DESCRIPTION	PHASE	FUND	ESTIMATED COST
AWARDED SEPTEMBER 6, 2005	3	9.0 & 9.01	WARREN		I 65	MAJOR WIDENING(O)	TENN. STATE LINE- ELIZABETHTOWN; WIDEN I-65 TO 6-LANES FROM SIMS RD TO 1.53MI SOUTH OF THE BARREN RIVER BRIDGES INCLUDING INTERCHANGE AT WILLIAM H. NATCHER PARKWAY. (GARVEE JM1)	C	JM1	34,574,548
AWARDED JUNE 30, 2005	6	72.06 & 72.07	GRANT		I 75	MAJOR WIDENING(O)	LEXINGTON-COVINGTON; FROM SOUTH OF KY-36 (MP 153.30) TO 0.8MI SOUTH OF KY-22 (MP 157.70) (CONSTRUCTION SECTION-1C) (INCLUDES MAINLINE PAVING OF I-75 THROUGH BARNES PIKE I-CHNG)(GARVEE JM2)	C	JM2	24,740,000

## APPENDIX B

### 2005 BOND PROGRAM PROJECT STATUS

During the 2005 legislative session, the KYTC was authorized to sell State Road Bonds in the amount of \$300 million to supplement state revenues dedicated to the state projects (SP) element of the Six-Year Highway Plan. This was deemed necessary because the projects' costs contained in the Six-Year Highway Plan exceeded revenue expectations by \$1.5 billion due to a failed effort to increase the state gas tax in the Year 2000. At this time, the KYTC has obligated \$161 million of the \$300 million toward "SP" construction projects as shown in the map below and listed in the table on the next page. By late Calendar Year 2006, the 2005 "SP" Bond issue will have been obligated in full, with \$300 million of worthwhile construction projects either completed or underway.



LISTING OF AUTHORIZED STATE FUNDED "BOND PROGRAM" PROJECTS  
(AS OF FEBRUARY 3, 2006)

LETTING DATE	DIST	ITEMNO	COUNTY	PREFIX	ROUTENO	TYPE OF WORK	PROJECT DESCRIPTION	PHASE	FUND	ESTIMATED COST
AGREEMENT WITH CITY JUNE 17, 2005 PROJECTED LETTING <del>7-15-2006</del>	1	8200.00	MCCRACKEN			NEW ROUTE(O)	COMPLETION OF PECAN DRIVE	C	SP	4,300,000
AWARDED AUGUST 12, 2005	2	215.00	HOPKINS	KY	70	MAJOR WIDENING(O)	MADISONVILLE-CENTRAL CITY; MAJOR WIDENING FR E.T. BREATHITT PARKWAY (PENNYRILE PARKWAY) TO KY- 85 (EAST OF THE E.B. PARKWAY)	C	SP	21,091,318
AWARDED OCTOBER 3, 2005	3	310.00	WARREN			NEW ROUTE(O)	EXTEND BOWLING GREEN BYPASS (KY 880) FR KY-185 TO 7TH AND COLLEGE ST INTERSECTION.	C	SP	5,894,115
AWARDED MAY 23, 2005	3	2008.00	BARREN	LN	9008	PAVEMENT REHAB-PRK(P)	LOUIE B. NUNN PARKWAY (CUMBERLAND PARKWAY) FROM MP 20.357 IN BARREN COUNTY, EASTERLY TO MP 36.159 IN METCALFE COUNTY.	C	SP	5,202,019
AWARDED AUGUST 8, 2005	3	8101.00	EDMONSON	KY	187	SAFETY(P)	LOWER GRADE ON KY-70 AT KY- 187 INTERSECTION TO IMPROVE SIGHT DISTANCE. (02CCN)	C	SP	282,664
AWARDED AUGUST 12, 2005	3	8102.00	SIMPSON	KY	100	SAFETY(P)	TURNING LANE ON KY-100 IN FRONT OF THE E. INDUSTRIAL PARK NEAR THE INTERSECTION OF KY-100 AND I-65. (02CCN)	C	SP	175,496
AWARDED OCTOBER 27, 2005	4	283.00	MEADE	KY	448	MAJOR WIDENING(O)	BRANDENBURG STATION FR KY-1638 EXTENDING NW TO BRANDENBURG BYPASS.	C	SP	5,279,001
AWARDED AUGUST 8, 2005	4	311.00	NELSON	US	31	RECONSTRUCTION(O)	BARDSTOWN-LOUISVILLE ROAD; RECONSTRUCT US31E FROM KY-245 TO NORTH OF MURRAYS RUN ROAD. (98CCR)	C	SP	6,786,004

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LETTING DATE	DIST	ITEMNO	COUNTY	PREFIX	ROUTENO	TYPE OF WORK	PROJECT DESCRIPTION	PHASE	FUND	ESTIMATED COST
AWARDED JUNE 30, 2005	5	139.01	JEFFERSON	KY	864	SAFETY(P)	REALIGN FEGENBUSH LANE (KY-864) FROM POPLAR LEVEL ROAD EXTENDING SOUTH 0.05 MILE AND CONSTRUCT NEW BRIDGE AT FERN CREEK.(00CCR) (\$396,523 OF FY02 'TCSP' FUNDS AUTHORIZED FOR R PHASE)(02KYD)	C	SP	661,333
AWARDED JUNE 30, 2005	5	141.00	JEFFERSON	KY	22	SAFETY(P)	ADD LEFT TURN LANE ON KY-22 AT MURPHY LANE AND CORRECT SIGHT DISTANCE PROBLEM.(00CCR)	C	SP	1,782,565
AWARDED SEP 6, 2005	6	147.20	CARROLL	US	42	SPOT IMPROVEMENTS(O)	CARROLLTON TO MARKLAND DAM; SPOT IMPROVEMENT FOR RECONSTRUCTION OF US-42 FROM BURLEY ESTATES TO APPROX. 800 FEET EAST OF FOUR MILE ROAD, INCLUDING REPLACEMENT OF THE FOURMILE CREEK BRIDGE (B01).	C	SP	6,070,102
AWARDED JUNE 30, 2005	6	313.20	KENTON	KY	17	MAJOR WIDENING(O)	COVINGTON-INDEPENDENCE; MADISON ROAD FR PELLEY ROAD TO APPLE DRIVE.	C	SP	16,763,448
AWARDED AUGUST 12, 2005	6	313.50	KENTON	KY	17	MAJOR WIDENING(O)	COVINGTON-INDEPENDENCE; MADISON ROAD FR KY 16 TO APPLE DRIVE.	C	SP	8,634,819
AWARDED JUNE 30, 2005	6	316.01	BOONE	KY	1017	MAJOR WIDENING(O)	WIDEN TURFWAY RD FR US-25 TO KY-717 NEAR TURFWAY PARK. (00CCR)	C	SP	11,783,687
AWARDED OCTOBER 27, 2005	7	124.00	MONTGOMERY	US	460	MAJOR WIDENING(O)	WIDEN TO 5 LANES FROM KY-686 TO NORTH OF I-64 I-CHNG IN MT. STERLING (CONNECTING TO 7-317.00 IMPROVEMENTS)(INCLUDES RAMPS) (98CCR)(00CCR)	C	SP	8,924,945

LISTING OF AUTHORIZED STATE FUNDED "BOND PROGRAM" PROJECTS  
(AS OF FEBRUARY 3, 2006)

LETTING DATE	DIST	ITEMNO	COUNTY	PREFIX	ROUTENO	TYPE OF WORK	PROJECT DESCRIPTION	PHASE	FUND	ESTIMATED COST
AWARDED MAY 10, 2005	8	162.61	ADAIR	KY	61	RECONSTRUCTION(O)	RECONSTRUCT KY-61 FROM 2139 FEET SOUTH OF THE LOUIE B. NUNN PARKWAY (CUMBERLAND PKWY) TO 3870 FEET NORTH OF THE LOUIE B. NUNN PARKWAY (SECTION 2A) - CONSTRUCTION SEQUENCE 1. (2004BOPC)	C	SP	7,149,030
AWARDED JUNE 30, 2005	8	162.65	ADAIR	KY	61	RECONSTRUCTION(O)	RECONSTRUCT KY-61 FROM 3870 FEET NORTH OF THE LOUIE B. NUNN PARKWAY (CUMBERLAND PKWY) TO COLUMBIA BYPASS (SECTION 2B) - CONSTRUCTION SEQUENCE 2. (2004BOPC)	C	SP	7,785,300
AWARDED JUNE 30, 2005	10	132.00	LEE	KY	52	ROCKFALL MITIGTN(P)	CORRECT ROCKFALL PROBLEM AT SHARP ROCK ON KY-52 EAST OF BEATTYVILLE.	C	SP	4,069,614
AWARDED NOVEMBER 14, 2005	11	120.00	WHITLEY	US	25	RECONSTRUCTION(O)	WILLIAMSBURG TO GOLD BUG INTERCHANGE @ I-75; CONSTRUCT 3-LANE SECTIONS WHERE NECESSARY TO RELIEVE CONGESTION (98CCR) AND INCLUDING 11-5001.00 & 11-5002.00 WHICH ARE BEING COMBINED INTO THIS PROJECT.	C	SP	8,279,980
AWARDED OCTOBER 3, 2005	11	278.22	LAUREL	KY	30	RELOCATION(O)	I-75 TO MOUNTAIN PARKWAY; RELOCATE KY-30 FROM VIVA EAST TO APPROX. 1.3 MILES TO NEAR FREEMAN BRANCH ROAD. (2004BOPC)	C	SP	4,037,596

LISTING OF AUTHORIZED STATE FUNDED "BOND PROGRAM" PROJECTS  
(AS OF FEBRUARY 3, 2006)

LETTING DATE	DIST	ITEMNO	COUNTY	PREFIX	ROUTENO	TYPE OF WORK	PROJECT DESCRIPTION	PHASE	FUND	ESTIMATED COST
AWARDED AUGUST 12, 2005	11	279.22	WHITLEY	KY	92	RELOCATION(O)	US-27 TO I-75 (SECTION 4 REMAINING); FROM CORNBREAD BRANCH NEAR OLD JELICO ROAD EAST TO KY 296 (PRIORITY SECTION 2). (GRADE & DRAIN ONLY, SEE ITEM NO. 11-279.23 FOR SURFACING) (PE, ENV & DE UNDER 8-261)	C	SP	12,246,287
AWARDED JUNE 30, 2005	11	279.25	WHITLEY	KY	92	RELOCATION(O)	US-27 TO I-75 (SECTION 4B); FROM KY 296 EAST TO I-75 (PRIORITY SECTION). (PE, ENV & DE UNDER 8-261)(TO BE LET WITH 11-124.00)	C	SP	3,941,669
AWARDED OCTOBER 27, 2005	12	285.00	MARTIN	KY	40	RECONSTRUCTION(O)	KY40; RECONSTRUCTION AT BUCK CREEK HILL (00CCR)	C	SP	1,996,858
AWARDED OCTOBER 27, 2005	12	297.00	JOHNSON			DESIGN ENGINEERING(O)	LOCATE NEW BRIDGE OVER LEVISA FORK AT RIVER, KY.	C	SP	6,204,224

## APPENDIX C

### KENTUCKY'S "MEGA-PROJECTS"

As the 2006 edition of the Enacted FY 2007-2012 Six-Year Highway Plan was developed, strong consideration was given to the funding needs associated with four "Mega-Projects" located in Kentucky. The term "Mega-Project" is a reference to the fact that each project will cost near, or in excess of, \$1 billion. As the following map shows, these projects are (1) the Louisville Bridges project, (2) the Interstate 71/75 Brent Spence Bridge congestion relief project in northern Kentucky, (3) the Proposed Interstate 66 project in southeastern Kentucky, and (4) the Proposed Interstate 69 project in far western Kentucky. Each of these projects would be an expensive, but welcome, addition to Kentucky's highway system.

Each of the four "Mega-Projects" is underway, with varying levels of progress achieved. This appendix provides a description, an approximate total cost, and a brief report on the progress to-date for each project.

#### **The Louisville Bridges**

The Louisville Bridges project is located in the Louisville metropolitan area and involves a two-part approach to resolving traffic congestion problems in the region. The existing highway network features a myriad of interstate highway facilities (Interstates 64, 65, and 71) that all meet in a tangled maze of ramps known locally as "Spaghetti Junction" in downtown Louisville. Immediately associated with Spaghetti Junction is the Interstate 65 Kennedy Bridge, which links downtown Louisville with Jeffersonville, Indiana. Since there are no true outer beltways linking the Kentucky and Indiana portions of the Greater Louisville Area, virtually all north-south and east-west traffic is forced through Spaghetti Junction. This creates traffic delays of major proportions during peak morning and afternoon rush hours.

While Spaghetti Junction and the Kennedy Bridge certainly need to be modernized, transportation professionals understand that a major culprit in downtown Louisville's traffic congestion is the absence of a "relief valve." To truly accommodate future traffic in the Louisville area, it is essential to connect together the dangling ends of Interstate 265 east of Louisville. This can be accomplished by building a new bridge over the Ohio River in the vicinity of Prospect, Kentucky, and Utica, Indiana. This new "East End Bridge" would provide an alternative route to Spaghetti Junction and would work in concert with the "Downtown Bridge" to move traffic efficiently through the region.

Much work has been done over the past few years to complete an Environmental Impact Statement for the Louisville Bridges project and design work is now fully underway. The costs for this project over the multi-year project life are expected to approach \$2.5 billion. Recognizing the dependence of each bridge on the other, a careful balance has been crafted to pursue both new bridges in a harmonious manner. Within the next few months, Kentucky and Indiana will jointly develop a financial plan for this project under the scrutiny of the FHWA. Of principal concern to the FHWA is the manner in which each state will deliver funds to the continuing project development effort. Indiana has accommodated their share of the Louisville Bridges in their Ten-Year Highway Plan. This edition of Kentucky's Six-Year Highway Plan contains \$789 million of funding commitments through the Year 2012. This represents Kentucky's strong commitment of traditional federal-aid highway funds to the current project schedule.



## **The Interstate 71/75 Brent Spence Bridge**

The Interstate 71/75 Brent Spence Bridge is the focal point for some of the heaviest traffic volumes in Kentucky as these two major north-south interstates cross the Ohio River between Covington, Kentucky and Cincinnati, Ohio. This bridge not only serves traffic between two major urban centers, but it also connects the downtown areas with one of the world's busiest airports, the Greater Cincinnati/Northern Kentucky Airport located in Boone County, Kentucky. In recent years, the existing double-deck bridge has been "re-striped" to carry additional lanes of traffic and, although the bridge is still structurally strong as indicated by its sufficiency rating of 64.0 out of a possible 100 points, it is functionally outdated.

Recognizing the old bridge's inability to meet today's traffic demands, and knowing that the situation will only worsen in the years ahead, metropolitan transportation planners are working with the KYTC and the Ohio Department of Transportation (ODOT) to craft a reasonable solution. Design studies are currently underway to narrow the options for a new Ohio River bridge, from which further project development work can determine the most desirable means of solving the traffic problem at this location. There are environmental issues, downtown redevelopment concerns, and physical alignment constraints that work together to make this a very challenging project. Accordingly, one of the most challenging considerations will be the project cost, which is estimated at \$750 million, but could grow significantly depending upon the ultimate improvement option recommended. Kentucky's share of the project cost is estimated to be \$500 million, with Design, Right-of-Way, and Utility funding provided already by a federal Congressional earmark. The \$440 million construction phase remains to be funded after the Year 2012.

## **Proposed Interstate 66**

The Proposed Interstate 66 (TransAmerica) Corridor in southeastern Kentucky extends from Interstate 65 near Bowling Green along the Cumberland Parkway to west of Somerset, from which it departs and extends north and east around Somerset, then along KY 80 and south to Interstate 75 south of London. From Interstate 75, the Corridor extends eastward along the Hal Rogers Parkway to Hazard before heading east to US 23 south of Pikeville. From US 23 south of Pikeville, the Proposed Interstate 66 would extend across the rugged mountainous terrain of Pike County to the existing US 52 (Proposed Interstate 74 Corridor) near Matewan, West Virginia. Along this course, the Proposed Interstate 66 would pass through some of the most severely economically distressed counties in Appalachia.

At the present time, there are three independent segments of the Proposed Interstate 66 that are involved in some degree of highway project development. The first of these segments is the north bypass of Somerset, which will serve to provide a high-speed connection from the Cumberland Parkway to KY 80 east of Somerset. Preliminary engineering and environmental studies have been completed, with design and right-of-way activity scheduled to proceed in the very near future. The Cumberland Parkway to US 27 segment of this project is expected to be completed first to coincide with the construction of the Somerset Southwest Bypass. These two projects together would offer a US 27 west bypass of Somerset. The full north bypass of Somerset is expected to cost approximately \$250 million.

The second active Proposed Interstate 66 project in southeastern Kentucky is the connector between KY 80 east of Somerset and Interstate 75 south of London. Preliminary engineering and environmental work are underway for this section, with an approved corridor location expected by the summer of 2006. There are many environmental issues associated with this project including involvement with the Daniel Boone National Forest, a wild and scenic stretch of the Rockcastle River, and numerous cliffline, cave, and cultural/historic concerns. There has been, and will continue to be, considerable public involvement and coordination with resource agencies to minimize the environmental effects of this project. The total estimated cost of the Somerset to London section of the Proposed Interstate 66 is \$1.5 billion.

The third section of the Proposed Interstate 66 that is being developed is the portion of the route between US 23 south of Pikeville and US 52 (Proposed Interstate 74) in West Virginia. An Environmental Impact Statement for this segment of Interstate 66 was completed in October 2003. While environmental issues have proven to be minimal in the Pike County area, the rugged terrain makes this one of the most expensive sections of the Proposed Interstate 66 to build. It is expected that it will cost more than \$2 billion to complete this connection between US 23 and US 52.

## Proposed Interstate 69

The Proposed Interstate 69 is being pursued in some manner by every state it traverses, from south Texas to the Michigan border with Canada. The impetus for Interstate 69 is Latin American trade and the overland transportation need to link Latin America with Canada and the northeastern United States. The states involved in this project are Texas, Louisiana, Arkansas, Mississippi, Tennessee, Kentucky, Indiana, and Michigan. An Environmental Impact Statement has been prepared for the entire route, with the “purpose and need” of the project focused squarely on freight movement.

In Kentucky, Interstate 69 will follow the existing Purchase Parkway from the Tennessee State line to Interstate 24, then Interstate 24 to the Western Kentucky Parkway, then the Western Kentucky Parkway to the Pennyriple Parkway, then the Pennyriple Parkway north to Henderson. At Henderson, a new route (including a new Ohio River bridge) will be required to connect to Interstate 64 in southern Indiana. Both Tennessee and Indiana are actively engaged in pursuing their own segments of Interstate 69, and each state has cooperated in studies to assess connections at the state lines.

For Interstate 69 to become fully functional in Kentucky, it is expected that the existing parkway system will have to be upgraded. The Purchase, Western Kentucky, and Pennyriple Parkways are all limited access, four-lane divided highways, but there are spot locations where access control would have to be tightened and shoulder widths, clear zones, and bridge dimensions addressed before interstate highway design standards are achieved in full. It is expected that such upgrades will cost \$700 million or more to accomplish. At Henderson, the new route and its new Ohio River bridge will likely cost an additional \$800 million to complete. The KYTC has recently completed a study of the parkway upgrade needs from Interstate 24 to Henderson and has worked with Indiana to develop a Draft Environmental Impact Statement for the new Ohio River crossing at Henderson. Continuing work on Interstate 69 in Kentucky will depend upon the financial support that can be garnered for the project through federal reauthorization and appropriations processes.

